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MOVING HOUSE.

'THREE removes are as bad as a fire,' says the adage. I have not been entirely burned, but have been just a little singed. I have only moved once, but that once was a warning to humanity—ghastly in its commencement, awful during its continuance, and intolerable till its conclusion.

The Persians were ingeniously cruel, no doubt, when they smeared a criminal with honey, and bound him to an ant's nest. The ancient Scythians shewed a pretty fancy when they dragged the tops of four strong, lithe, young poplars together, then lashed a traitor to the combined branches, and let them spring back, to the instant extinction of the wretch's life. But still, neither Persian nor Scythian, with all their honey and poplars, ever invented any mental or bodily torture equivalent to that of 'Moving House.'

Envy the unsophisticated dwellers in huts, ye dwellers in cities, though camel's milk be inferior to comet port, and the desert sands be mere drifts of fleas, for the Arab leads away his mare, rolls up his carpets, bundles off his wife, and shifts his whole household in half an hour, leaving no trace of his residence but a pile of date-stones, and a black ring where the last fire had been. Truly, our modern civilisation multiplies our wants, but does it also double our pleasures?

Unhappy the man who suddenly awakes to the fact (having made a hit on 'Change, or being blessed by an increase in his family, or having received a legacy) that his house is too small for him. That idea having once taken possession of his miserable brain, nothing in the place henceforward appears to him in its true colours. It seems to contract before his eyes—to close in upon him like the fabled iron prison, inch by inch.

A house is at last chosen, and the time is actually fixed for the moving. The vans are ordered from the nearest town, after much haggling. According to the plausible upholsterer, moving is the merest trifle and almost an enjoyment: done in a day, and at a slight expense.

'Any danger of breaking?'

The stout upholsterer laughs derisively. 'Break?' He really seemed to have forgotten the word, or to have erased it from his dictionary. He had just sent a van full of glass shades safely a distance of six hundred miles—shades not even packed. Expense? Hardly anything—nominal. Four horses to a van—a shilling a mile per horse. What was that, you know? Then for packing, merely fifteen shillings a day, and travelling expenses. The same when out with the vans. No return-fare, of course. Packing all done speedily and safely. First-class men—enormous wages.

Mr Merryden (for so let us call the man about to move) returns home from the county town elate at the economy and speed with which the whole business (falsely considered expensive and troublesome) is to be conducted. He praises the progress of things to Mrs Merryden; alludes to the comfort, now so easily secured, of doing matters with rapidity and precision. Mrs M., who is conservative and nervous, expresses her fears about the drawing-room ornaments being broken, and the best telescope-table being scratched (as poor Mrs Numby's was); but is quelled by Merryden's loud voice and sanguine reassurances.

'Would not the railway be better and cheaper?' suggests Mrs M., roused by the amiable wish to appear more sagacious than Merryden, who hates opposition, and worry, and fuss, and loves his ease.

'No. Jobson, the upholsterer at Chalkerton, at once pooh-poohed railway luggage-trains; and he is a man of great experience, you know, my dear, and does these things every day. Is moving now for Canon Chatterton, all the way to Durham, lots of glass and china; famous for his old Venetian glass, you know—the canon.'

'But the railway is quicker, John, and I should certainly think cheaper?' suggests Mrs M., not to be convinced, wherever the canon may be going to.

'Won't do at all. Transfer at junctions plays old gooseberry with the glass and polished furniture—above all, the dreadful jolts, when the train is shunted; and then the porters haul and tumble the things about, and the company won't hold itself accountable. Oh, railways won't do at all;

the road's the true way—straight from door to door—saves a world of bother.'

'That is all you men think of' (this is the last Parthian arrow from defeated Mrs M.); 'anything just to save yourselves trouble, let the expense be what it will. Mind' (here Mrs M. becomes solemn and prophetic), 'if all the furniture gets broken, it's not my fault.'

Merryden growls denunciations of all restless and nervous people who invent trouble and forebode evil. It is his plan, he boasts, always to take things in 'a quiet sort of way;' and here he breaks into song, and rings for coffee, which means that he will discuss the matter no further.

The decree has gone forth, and Mrs Merryden must obey.

Day by day, the horrible event tightens its folds on that unfortunate lady. One by one the carpets are stripped off, and the house is flayed as if it was a huge dead animal, whose skin was its only valuable part. One by one the pictures are removed, and placed in melancholy stacks against the walls. These being gone, a new element of misery succeeds, for the whole place sounds hollow as a family vault, and promises to soon look as cheerful. The merest platitude is echoed back in ghostly mockery.

The first bitterness of the business is tasted by the miserable Mr Merryden; while the more doleful and bare the house becomes, the more bustling and victorious grows Mrs Merryden, the rejoicing housewife who directs the storm.

A light cart! That is the man to pack the china. Mr Merryden is requested, as a particular favour, to allow that operation to be performed in his study, as it is near the storeroom, where the best china is. He consents, but scarcely with gracefulness; in fact, we blush to say, he swears. He goes out, to forget his troubles in a long walk. He returns, and finds six crates standing at the door of his study, like the first sketch of a stable, in an animal painter's studio.

'The packing,' says Mrs Merryden, 'has been most beautifully done, and only one marble slab and two washing-jugs broken—cracked before, the foreman from Batson's said—most gentleman-like young man—"Wished Mr Merryden had been at home; he would have been so useful handing the things to the packers."'

'Straw enough for a dragoon regiment,' growls the ungrateful and unworthy Merryden. 'Why on earth not leave it all,' he suggests, 'to the upholsterers?'

'Yes, and have two-thirds broken, and the rest cracked. Why, John, you must be out of your senses!' snaps Mrs Merryden. 'What a goose you must be to believe what such people tell you.'

'But the big glass shades, dear—six hundred miles'—

'Stuff and nonsense! All packed in boxes, I daresay.'

'But, I tell you, old Jobson himself told me that their vans had beds and wells sunk below

the flooring, and the delicate things are placed there, embedded in hay.'

'It is no use talking, John. If you were to talk seven hundred years, you would never convince me; so pray, let things go on.'

So things did go on; that is to say, Mrs Merryden does as she likes, and household misery reigns supreme; as some of it necessary, some avoidable, if Mrs Merryden was only a little less anxious, and a little more hopeful.

Then the books have to be packed. Each box becomes a vast puzzle, always presenting corners and triangular nooks, which the last volume in the row obstinately refuses to fill. The shelves look dismally blank when the books, their old companions, have been nailed down in the darkness of their temporary coffins. There they are—Horace and Molière, Homer and Peter Pindar, in strange fellowship and close confinement, for Heaven and Mrs Merryden only know how long. The unhappy husband sighs as he nails on the last lid, or tries, like a Samson, to drag the chests to a convenient and out-of-the-way spot.

Of course there is to be a sale of refuse things. Mrs Merryden is powerful upon the absurdity of taking 'that old-fashioned sofa,' 'that ugly set of china,' 'that hideous chiffonier,' and Mr Merryden's next awakener is the appearance of a quick-eyed subservient auctioneer's man from Chalkerton, who stalks about taking notes. He urges the sale of all Mr Merryden's favourite furniture, and can hardly be prevented by force from jotting it down in his catalogue. It is horrible to the discomfited Mr M. to see this interloper pinching and tacitly criticising the table round which friends have so often sat, and behaving with marked disrespect to old family pictures.

The week before leaving his house is indeed a perturbed and painful one to Merryden. It is full of discomfitures; day by day his comforts are snatched from him, as the leaves are plucked one by one from an artichoke: to-day, the pictures; to-morrow, the piano; the next day, the books; the day after, the carpets. How mournful the trees in the old walks look; the poplars seem to shudder; the very vines on the wall seem in pain. The meanest thing has a significance now. The very moss on the sun-dial he has a regret for, and is loath to leave. Not, by the by, that Merryden is a sentimentalist, by any means, but these feelings come by instinct, and need no culture. He feels, too, a sort of jealousy to think that at this favourite window a new man should look out—that this garden-walk another should pace. But life is full of farewells, and this is one of them. What is life, in fact, but a series of farewells, and so he remarks to Mrs Merryden; but she replies: 'Stuff and nonsense, John; go and help me to pack the pictures in the spare room.'

The fatal morning—bleak, cold, and ominous of ill—Merryden, smoking his cigar after breakfast in the higher part of his garden, espies a huge van, drawn by four brawny horses, emerge from a rolling cloud of dust on the high-road from Chalkerton.

It is a huge yellow parallelogram, blazoned with the name of Jobson, in tall, obtrusive crimson letters; and the four stalwart chestnut horses haul it bravely towards its destination. The village boys follow it, shouting, believing it to be a wild-beast caravan. Presently, it passes the gate, and crushes its way up the meadow to Merryden's back-door. The horses are detached; a square truss of hay rolls off the roof, chains rattle, the van-door is solemnly unlocked. The driver drags out countless bundles of bass-matting and carpeting, and removes the floor planks of the huge vehicle. Away jingle the horses to their stable in the village inn. Another moment, and a man appears at the kitchen-door with a chair and a green-painted wash-stand, which he places on the grass, as if he was arranging for a picnic. Miserable Merryden! you never felt the curse till now—discomfiture is upon you, sudden as an avalanche, irresistible as Niagara. The real moving, 'no steps backward,' has commenced. 'They're going now, and no mistake about it,' as a passing labourer is heard to pointedly observe.

Merryden, going to inform his wife, finds her knee-deep in preserve-pots, which she is hurriedly trying to pack in hay, and sink in a large chest; while two of the upholsterer's men, like cavalier soldiers sacking a mansion, are carrying off, to her horror, arms-full of the 'best set.'

'O Mr Merryden!' she groans hysterically, 'these men tell me that they must get all the packing done to-night, and we thought they were going to take two days and a half. And there's all the linen to pack, and all the bedding, and the ornaments. O dear, dear, it is cruel, John; it is enough to kill any human being ten times over. They say, never mind packing, but pack I will. I know how things are spoiled.'

Merryden tries in vain to comfort the distracted woman, who will pack a cheval glass in spite of the foreman's entreaties. In vain he assures her that mahogany is rather improved by moving, and that breaking glass is an accident unknown to them. Disorder worse than prevails in a plundered city; looking-glasses, unscrewed, lie on the floor, stacks of pictures encumber the hall, piles of carpet pyramid the stair-landings, book-chests fill the kitchen, stair-rod covers the dressers, wardrobes stand like sentinel-boxes at the front-door, shouting men, urged on and guided by a burly foreman, steer down stairs chests of drawers and frames of book-cases. Mrs Merryden vehemently declares that her head's going, and she cannot do it. They must stay another day. Meanwhile, firm and imperturbable, the foreman packs and packs the huge puzzle, which is to dovetail together and pile the van. Is the house not gone mad? thinks the frightened Merryden, as the old fixed and familiar objects seem to become alive and revolve around him till he is the centre of a whirlpool, a Malström of furniture.

Mrs Merryden, now worn and weary, still feebly essays to pack small vases and little Sèvres ornaments with extreme care in cotton-wool. But, one by one, the Harpy men snatch from her the objects of her care, and bear them away to the all-receiving, enormous Juggernaut of a van. Jobson's myrmidons are irresistible as Fate; there is no false sentiment about them; what they have to do, they do.

Rapidly the contents of the house are decanted into the van. In the parlour, lately so well

furnished, there are now only the fender and fire-irons left.

Merryden, reconnoitring round the house, finds a great dusty sheet of brown paper blowing over the lawn, and there is straw-strewn round the garden-gate, usually a very threshold of the temple of neatness.

At every table or chair that is brought out, the village children shout, for to them the moving is a sight, and the boldest of them take dress-circle seats on an overlooking wall. Merryden's dinner on the day of moving is unimportant in quality and frugal in character. It is taken on the top of a book-chest, and he and his wife have one knife between them. Two other vans arrive later, and are loaded in the same way. Mrs Merryden wanders about lamenting and wringing her hands, like Hecuba, over boxes full of discordant and hopeless lumber.

There is a difficulty at last about a loo-table that cannot be got in, and it is left behind to be sold; and the doors of the last van are closed and bolted, just as the fly arrives to bear Mr and Mrs Merryden away to the railway station. As Mrs Merryden is driven off from the old house, so dear to them both, she expresses her comforting fears to her husband, 'that those men will break every bit of that glass,' to which Merryden, who is now restored to power, cruelly replies: 'Pooh! my dear, you are always anticipating the worst. —Drive faster, man, or we shall be late.'

THE ATLANTIC TELEGRAPHS.

BY AN EYE-WITNESS.

IN THREE CHAPTERS.—CHAPTER III.

WE had been preceded by the *Albany*, carrying Captain Moriarty, R.N., and H.M.S. *Terrible*, who were to go and define the spot beneath which the end of the cable of 1865 lay, to buoy the ground, and, if possible, to raise the cable from the bottom, and so anticipate the great ship in the work which she hoped to accomplish. When the *Great Eastern* and *Medway* left Heart's Content, many who watched us doubtless thought that we were bound upon a fool's errand. When Mr Canning, after the snapping of the cable of last year, declared his intention of grappling for the lost treasure, nearly all on board the ship regarded him as a reckless madman, determined on wasting time and money on a phantom—the very idea was at once ridiculous and absurd. These opinions were, however, soon changed when they saw the marvellous results of the three attempts at grappling. After drifting for some hours, the strain suddenly increased, and that exactly over the line of the cable, as proved by solar observation. Three times the body in which the grapnel had hooked was lifted from the bottom, and on each occasion the *grappling-rope* broke at a certain strain; but at neither attempt did the grapnel free itself from that which it had caught. This series of phenomena could have been occasioned by only one thing—the cable. Popular opinion on board the ship now changed, and all were anxious to procure stronger ropes, and recover the lost cable.

We took three days to accomplish our short trip

to the grappling-ground, or perhaps I should rather say the grappling-water; and about 2 P.M. on Sunday, 12th, we sighted the *Albany* and *Terrible*. The weather being boisterous, we did not attempt to grapple that evening. The *Albany* signalled to us 'that she had grappled twice, and had succeeded in hooking the cable at the second attempt; that she had buoyed it when raised 150 fathoms from the bottom, but that the chain of the buoy-ropes had given way shortly after, and that the rope was lost again.'

On Monday, 13th, we made our first attempt at grappling. We began our operations at 12.30 P.M., and by 2 o'clock had paid out two thousand two hundred fathoms of grappling-rope. The wind being in one direction, and the current in one directly opposite, we scarcely moved from our original position, and accordingly, at 9 P.M., we began to haul in again. On our first day's fishing, we had no sport.

Here let us make a digression, and give a short description of the grappling-apparatus.

The grappling-rope is about two and a half inches in diameter, and consists of seven strands (six laid round one), each strand being composed of seven steel wires, surrounded by Manila hemp. The machine which *pays out* and *picks up* this rope consists of a double drum, round which the rope passes four times. These drums are worked by a seventy horse-power engine, made by Mr Penn of Greenwich, and, being capable of revolving in either direction, serve the double purpose of paying out or picking up. The rope is paid out over the bows of the ship, and passes, in its progress thither, under a dynamometer such as has been described as belonging to the stern-gear. Whenever the operation of grappling was in progress, a knot of anxious watchers might be seen gazing incessantly at the indicator for any sign of an increased strain, this being the only means by which it could be inferred that we had hooked our prize. This instrument was to us what the float is to the angler. The next favourable day was Wednesday, August 15th, and accordingly, by 2 P.M., we had paid out our rope and grapnel. We drifted quietly in a northerly direction and across the line of the cable until 5.30, when the dynamometer gave indication that we had 'hooked.' This increased strain continued till 7.30, when Mr Caning gave the order to 'pick up.' The *Albany* and *Medway* had been grappling on either side of us, the one about three miles to the eastward, and the other a little distance to the west, but as yet had given no signs of having hooked the cable. About the time that we began to pick up, a thick dense fog rose, which rendered our consort-ships invisible, and made the chances of a collision not improbable. While we were in doubt if we really had got the cable, and just as we began to haul up the rope, an incident occurred which at once quieted all doubts: we ran foul of No. 1 buoy, which had been placed by Captain Moriarty to mark the position of the end of the cable; and this tiresome little customer had most inconveniently located himself underneath the starboard sponson, and there it seemed inclined to remain, bobbling about like a cork in a basin, despite of all efforts to disengage it. At last, however, after every means had been tried to get rid of our visitor, it took French-leave, and freed itself, disappearing in the darkness. This little incident, although not pleasant, was unavoidable, and did immense credit

to the skill of Captain Moriarty, who had placed the buoy to mark the cable, and shewed us to what a pitch of excellence, in skilful hands, the science of nautical astronomy could be brought.

After picking up about 1300 fathoms of rope, and having thereby raised the cable some 1000 fathoms from the bed of the sea, it was determined, owing to the unfavourable state of the weather, to buoy it in that position, and wait for daylight. An ocean-buoy was accordingly got out, and the requisite splicings were made between the buoy-rope and the grappling-rope, when, just as the operation was close on completion, one of the splices 'drew,' and we had the mortification of seeing the grappling-rope and its precious treasure recede from our gaze, and disappear beneath the waves. Thus our first actual grappling was a failure.

On Thursday, 16th, we shifted our position six miles to the eastward, so as to get quite clear of the sundry ropes that had been dropped last year, all round the spot where we supposed the end of the cable to be. The day was fine, and by 4.30 P.M. we had lowered 2400 fathoms of grappling-line, and by 7.30 the dynamometer told us we had hooked the cable.

It was considered advisable not to prosecute our work in the dark; so, as the night was calm, we paid out a considerable length of extra rope, that there should be no strain on the cable, and hung by it all night.

By 4.30 on Friday morning, the drums were revolving and picking up the grappling-rope once more; by 8 we had raised the cable one thousand fathoms from the bottom, and from this time, as the length of rope to be picked up became less and less, the excitement increased in an inverse ratio. At length we were told that the length of rope paid out had been picked up again; and still owing to *stretch* and *slip*, the thirty fathoms of chain carrying the grapnel did not appear. At length our excitement was raised to a terrific pitch as the first link of the chain came above water. Every available spot in the bow of the ship was doubly filled to see these last thirty fathoms come up, and to see what answer was to be given to the important question which had been so frequently asked during the past year. I don't believe that, as the chain came up, link by link, that there were ten persons in the ship who were sufficiently little excited to draw a breath; and it may be thought a most fortunate thing that we were not all asphyxiated during that awful five minutes of suspense. At last, we hear the remark buzzing round: 'I see the grapnel! There—look!' Another minute, and it is plainly visible, and over two of its flukes, in a black loop, with its two ends stretching tightly towards the sea, hangs the black old cable of 1865. It requires a nimbler pen than mine to describe the intense, overwhelming enthusiasm of this triumphant moment. The loud, irresistible, and spontaneous cheer which burst from all will never be forgotten by those who heard it. The eyes of every one seemed to twinkle with exultant joy, and dance with wild delight. Every mother's son amongst us was a madman for the time being. This was a time, however, of all others, demanding close attention, and the cheering was therefore stopped at once. There was much serious work to be done in the next few minutes. The *Terrible's* boats were already at the bows of the ship, carrying experienced cable-hands to secure our prize. They

advanced to the rope, and were busy in attempting to put a stopper on it, when suddenly there was heard a little snapping, tearing sound; the cable parted on the fluke of the grapple, and in another instant it was lost to view. *It had gone again!* It had appeared first to gladden our eyes at 10.45, and by 10.50 it was no longer visible. It seemed incredible, but was unfortunately too true; the cable which a moment before had seemed to be within our grasp, was now as far away from us as ever. That joy which before was so visible in every face, had now given place to a stare of blank amazement, and a look of sorrowful astonishment. This feeling of depression which supervened was transient in the extreme. All felt that, although we had not succeeded this time, yet we had proved that the deed could be accomplished, and that perseverance alone was needed to make the securing of the cable an absolute certainty. The sight of the long-lost rope was balm to the eyes of all. It had come like a bright spirit to cheer us on to further exertions—to tell us that all our labour had not been in vain—and that we should yet accomplish what we so ardently wished. It had come to assure us that our speculations had been correct, and that dynamometers spoke the truth.

On Saturday, 19th, our grapple was dropped. By 4.15, we had hooked, and began to haul in; and when we had raised the cable one thousand fathoms from the bottom, Mr Canning determined to buoy the bight, which operation was successfully accomplished by 10 o'clock, for the reader may be sure that there was no insecure splicing on this occasion.

On 22d, we lowered our grappling-rope again, about three miles west of bight buoy; but the ship not drifting properly, we picked up again.—The weather was now unfavourable to work till the 25th, when we made another attempt; but no sooner was our grapple down, than we discovered we were drifting wrong; so we hauled in our rope, shifted our position, and then dropped it again. This time, although drifting in the right direction, we passed over the line of cable without hooking anything. These incidents, when combined with gloomy weather, were anything but cheering, and their effects were soon visible on the spirits of those on board. 'We shall never see Heart's Content again,' said some; others considered 'that we might as well turn towards England,' and stoutly maintained that the middle of the Atlantic was a fit place only for convicts of the lowest grade. There were still some amongst us, however, who cheerfully held out that, with a couple of days' fine weather to help us, we should yet set sail for Heart's Content with the cable of 1865 streaming from our stern. The reader will please to bear in mind that our two consort-ships, the *Albany* and *Medway*, always grappled on either side of us, the one to the east about three miles, and the other a like distance to the west; but owing to their extreme unsteadiness on the water, their grapplings were not successful, and there is good reason to suppose that the cable was broken more than once during their endeavours by the heavy pitchings of these ships. It was the great aim of Mr Canning to lift the cable in three bights, so as to lessen the strain upon it; for if the cable were raised one thousand fathoms from the bottom in two places six miles apart, the big ship might go midway between these points, and lift a bight to the surface with comparative ease.

At 1.30 A.M. on the morning of August 27th, we were roused from sleep by the firing of a gun, and cheering, and soon the gladdening news arrived that the *Albany* had picked up the end of the cable, had brought it to the surface with very little strain, and had buoyed it, ready for us to pick up in the morning. Here was exciting news; no more sleep for any one that night. All were on deck at an early hour the following morning in the highest of spirits, on which, however, Captain Moriarty soon threw a damper of cold water. This gentleman, after observation, had come to the conclusion that the buoy which the *Albany* had placed was thirteen miles from the line of cable; and although it certainly held a bight of the 1865 cable, yet this bight must have two loose ends, or it could never have drifted so far away. This surmise proved to be correct, for on picking up the buoy, and taking the cable on board, it was found to be a piece only two miles in length. The proper explanation of this disappointment will probably never be known, for whether this piece of cable had been broken off from the main line by the heavy pitching of the smaller ships while grappling, or whether it was a piece used as a buoy-rope during the expedition of 1865, no one seemed able to decide, although the generality of opinion rather leaned towards the former hypothesis. To add to our disappointment on this occasion, Captain Moriarty declared that the bight buoy, placed by us on the 19th inst., had shifted its position, and was fairly adrift, being thus rendered perfectly useless; for, being adrift, it was clear that it no longer held the cable, and, having changed its position, it was no longer of any service as a mark. Our hopes were once more standing at zero. All the previous efforts to accomplish our object had been overturned by the mishaps of the previous day. Our bight buoy had gone, and we had but too good reason to suppose that at the spot where we were grappling, the cable was broken in more than one place.

On 28th, we grappled twice, and both times our grapple passed over the line of cable without hooking anything, this tending to prove the supposition that the cable was broken.

Considering these facts, it was determined to change our ground, and move eighty miles further to the eastward, where we were sure that no loose pieces of cable existed, and where the water was a trifle more shallow, being only about nineteen hundred fathoms in depth. We reached our new ground early on the morning of August 30th, but the weather was too unfavourable to allow of any operations on that day.

In the middle of the day, on Friday 31st, we lowered our grapple, and began to drift. We hooked the cable early on the morning of September 1, raised it a thousand fathoms from the bed of the ocean, and retained it in that position by means of a buoy. On Saturday, September 1, the sky was blue, and the sea was as calm as a mill-pond. Here was the very day for which we had been longing. The *Great Eastern* and the *Medway* both lowered their grapnels at 11 A.M.; the great ship being placed about three miles to the westward of the buoy, and the *Medway* a like distance west of the *Eastern*. Ten minutes after the *Great Eastern's* grapple was down, the strain increased, and it was jokingly remarked that 'we had hooked the cable.' This, to the surprise of all, turned out

to be true; and as the strain remained unaltered till 6 P.M., Mr Canning gave the order to 'pick up.' By 7.30 we had raised it some seven hundred fathoms from the bottom, and the strain still shewed that we had got our prize. Just at this time the *Medway* signalled that 'she had cable.' On receipt of this good news, Mr Canning at once stopped all operations on board the *Great Eastern*, and signalled back to the *Medway* 'to haul up quick, and break cable.' These orders were promptly obeyed, and at 10 P.M. she signalled back: 'Have broken cable.' On the instant of the receipt of this welcome intelligence, the operation of picking up was resumed on board the *Great Eastern*; and as each succeeding fathom of the grappling-rope came over the drum, our hopes rose higher and higher, especially as the strain, as shewn by the dynamometer, was comparatively small, and in noway sufficient to injure the cable. By 12.30 on Sunday morning, there were only fifty fathoms to come; and at ten minutes to 1 (ship's time), the bight of the cable appeared above the water. This was an anxious moment, since all who had seen the difficulties of 'stoppering' a cable feared lest some accident like that which occurred under similar circumstances on August 17, should arise in the moment of victory to mar our golden prospects.

An experienced man was lowered in a bight of a rope over the bow-sheaves of the ship on to one of the iron guards surrounding the hawse-pipes, and from this position he managed, but not without some difficulty, to secure the eastern side of the bight of the cable. The next task was to liberate the cable from the grapple, a work by no means easy, and one that took nearly an hour to accomplish. While these necessary works were being carried on, all was still as death; there was no cheering, no undue enthusiasm, to distract any one from his duty. Now and again, the voice of Mr Canning could be heard giving an order to the men engaged in 'stoppering,' and this, together with the answering 'Ay, ay, sir,' of the man below, was the only sound to be heard. All the ship's company were on deck; this was no time for sleep. Every one was in a state of intense quiet excitement. Every face bore an expression of mingled impatience and fear; impatience for the quick completion of the work, and fear lest something should happen to prevent that completion. It was three o'clock before the order was given to pick up slowly, and the drums began to revolve for the last time; and it was half-past three before the end of the cable was got into the testing-room. The scene in the testing-room was at once solemn and exciting. We were now to learn whether or not we had been labouring in vain for the last three weeks. After waiting for some time, the end of the cable is brought in, followed by Mr Canning and Mr Clifford. In half a minute more, the room is full, the door closed, and all eyes fixed on Mr Willoughby Smith as he lays bare the copper wires of the cable, and makes the connection with his instrument. The first signal is sent to Valentia, and the little light on the slide of Professor Thomson's galvanometer is seen to move briskly backwards and forwards, and then come to a stand-still. We all wait breathlessly for a reply, but none comes. Five minutes elapse, and then the second signal is sent. No answer again. The suspense is growing really awful, when, after the lapse of another five minutes, a third signal is transmitted; and in less than a

minute, the light is seen to move in answer, apparently of its own accord, and Mr Willoughby Smith bursts out into a loud cheer. This cheer is taken up first by those in the testing-room, then by those on the deck outside, and lastly, is heard to reverberate from the engine-rooms and stoke-holes below, again and again. Hurrah! Hip, hip, hurrah! The cable was now spliced to the portion we had on board. To effect this, the cable had to be taken from the tank, passed through the paying-out gear to the stern, then festooned along the starboard side of the ship, *outside everything*, and passed in again at the bows, to meet the end awaiting it there. The splice was completed by 6.45, and passed over the bow of the ship into the sea; the festoons along the side were then all let go, and, in a few minutes, we were once more actually paying out cable from the stern, and making the best of our way towards Heart's Content. Those who had toiled so unremittingly for the last three weeks were at last rewarded by a glorious success. Hopes, fears, and anxieties were now at an end.

This was truly a great day for Mr Canning, who had first originated the idea of grappling for a rope in the almost unfathomable waters of the Atlantic; and who, in the face of every conceivable discouragement, had at length brought his experiment to a successful termination, and converted an impossibility into an accomplished fact—a fact that will ever be connected with his name, and will tend to make his memory glorious, when his kind and honest face has been forgotten.

We were all very glad to be once more in receipt of news from Europe; and in a few hours after the completion of the splice, Mr Willoughby Smith published the first number of the second series of the *Great Eastern Telegraph*. Here were we, in the middle of the Atlantic, receiving news from both hemispheres at the same time. When we were within ten miles of Heart's Content, a fault occurred in the cable, which became instantly known in the testing-room, owing to Mr Willoughby Smith's excellently devised manner of testing. The ship was at once stopped, the cable cut, and the end tested, when, to our unspeakable joy, it was found that the fault had not gone overboard, so that it was not necessary to go through the hazardous process of 'picking up.' In three hours' time, the splice was completed, and we were going ahead. On making an examination of the fault, it was found to be precisely similar to those of last year: a piece of wire driven through the cable into the core. How the wire got there, it is impossible to say.

By twelve o'clock on September 8, we were at Heart's Content; and by 4 P.M. the shore-end had been landed, by processes exactly similar to those described before. On the following day, we set sail once more, all happy at the thought of returning to England, where many a loving heart was longing to greet us. The journey home was without any very remarkable incident. On Monday, September 17, the 'Wandering Warblers of the Atlantic' had the honour of appearing in the grand saloon before a numerous audience, when was performed a comic opera, in three tableaux, entitled *Contentina, or the Rope! the Grapple!! and the Yankee Doodle!!!* by J. C. Deane and G. V. Poore. In pleasures like this the time passed merrily away until we arrived at Liverpool on Wednesday 19th, where we all took leave of each other, and returned to our respective homes,

all proud to be identified with an undertaking which will ever be remembered as the most successful and the most wonderful which even this marvellous age has seen.

THE CURÉ AND THE PEAS.

Is there such a thing—I ask as a hesitating bachelor, who sometimes contemplates a change—is there such a thing as a married man who is master in his own house? I hate lodgings; living well, and upon food which appears to nourish me, so that if I walk fast, or hurry upstairs, I am apt to grow a little giddy, I have lost my nerve for chambers. Suppose one was to have a fit in the night! Altogether, I prefer living at hotels, especially since these large ones have become so general. Therein one goes to bed by machinery, one has reading-rooms, with lending-library books, smoking-rooms, billiard-rooms, all the comforts of a home and club combined, in fact; and one can travel all over the civilised world without getting beyond the reach of these enormous establishments, which are obliged to advertise themselves as 'Limited,' just as Alexander the modest had to keep a slave at his ear to remind him that he was mortal, not quite believing it, or wishing that any one else should do so.

Still, a man has different functions, and I think, at times, that perhaps I have worked up my palate and digestive organs sufficiently, and that it would be well to take a turn at my heart. I do not, however, want to forfeit any of the liberty I at present enjoy, and wish to know whether I can possibly taste connubial felicity and freedom at the same time. Of course, I am aware that every change in life is necessarily accompanied with risk; I might be inclined to face risk, but have I chance at all? One puts into a lottery with a certain amount of confidence, if one knows a man who once drew a prize in a concern conducted by the same people in a similar manner; one feels tempted to stake money at German watering-places, because one sees others winning, and actually getting paid; but it is absurd to subscribe to a lottery which is all blanks, or to gamble with card-sharps, who would not allow you to pick out the queen if you could, and could not pay you if you did.

Therefore, I ask, is there such a thing as a man who is master in his own house? If I could only meet with one well-authenticated instance, I might run the risk; but instances are so very difficult to authenticate, and in some half-dozen most promising opportunities I have had for investigation, the theory of marital authority has so miserably broken through.

I thought for a long time that the drunken, brutal wife-beater had it his own way, at all events; but accidental attendance at a police-office for several weeks taught me the difference. A great ruffian goes through a good deal before he takes to knocking his tyrant down, and jumping on her. To adduce his indefensible conduct in proof of his mastership, would be as absurd as to bring forward the excesses of revolted slaves in evidence of their being the oppressors, not the oppressed. Go a few steps lower down in the scale of humanity, and you may indeed find men who are real lords over

their wives, but they are not masters of their own houses, for they have none.

Besides, no gentleman could court a lady by knocking her on the head with his waddy (or weapon to that effect), and dragging her off by the hair (not to mention the insecurity of her *chignon*) to the woods. To lie and smoke and sleep all day, while one's wife procured food and prepared it, would not be so bad; but to have to squat on one's heels all night with a bow and arrow in one's hand, while she and the children slept, would be as indifferent a realisation of connubial bliss as that common in Europe.

In early youth, I always respected the Turks, as being thoroughly masters of their own houses; but it seems, from recent and authentic investigations, that the poor fellows are the worst off of all, plurality of wives meaning so many more hens to peck you. Still later lasted the prestige attached to the Mormon settlement on the Great Salt Lake, but the facetious Mr Artemus Ward has drawn a picture of the domestic affairs of Brigham Young himself not at all calculated to strengthen the impression we had conceived of marital omnipotence in that patriarchal community. One would have thought that a polygamist might apply the principle of 'Divide and govern' to social politics, were it not that Solomon must have been up to that as well as all other stratagems, and he certainly failed most signally. Now, I am not afflicted with false modesty, but I do not consider myself superior in wisdom to Solomon. Besides, I no more want a harem than a stud. What I sometimes feel the want of is a companion at meal-times, a friend to travel about with not too difficult to amuse, some one to go with me to theatre or concert-room and chat during the intervals of performance. I am tired of masculine friends with whom I have no community of interest; if they are busy men, they soon become bores, being always absorbed in matters which I do not care for; if they are idle men, they are listless. Female friends suit me very much better, but their society stimulates this yearning I have towards matrimony to such an extent that I tremble.

I was on the point of striking my colours twice last autumn, first at Scarborough, and then at Spa, and both times to widows; but I managed to hoist my sails and escape by a hairbreadth on each occasion.

My friend Smith laughs at me. 'Pooh!' says he; 'it's the easiest thing in the world to rule a woman: you have only to be firm and kind.' But Smith dare no more take me home with him to dinner without leave first asked and obtained than he dare smoke in his own drawing-room, or commit an assault on Jem Mace.

Brown laughs to scorn the idea of *his* being ruled by his wife, and he certainly blusters and grumbles about all his household arrangements in a way which makes his friends feel quite uncomfortable, and Mrs Brown takes it all in a very humble and submissive manner. But how is it that Brown goes so much into solemn society? Why is he always struggling to get into a set which he thinks a little higher than his present one? All who know Brown are aware that he hates formal parties, and that he thoroughly despises the vulgar ambition which leads men to drop their friends if they think that they can supply their places with acquaintances who are richer or more influentially connected. Can the mere act of marriage have

altered all his tastes and sentiments? Pooh! I want better evidence than his: the most obedient dog I ever possessed, the only one who would sit up for long with a pipe in his mouth, growled and snarled during the whole period of the performance.

I turn my eyes hopelessly round the civilised world. To France, where the women of the middle classes keep the purse and manage the business, allowing their husbands a franc or two, when good, to go and spend at the café; while, as for the ladies and gentlemen, if one may believe the plays and novels which profess to portray Parisian society, female supremacy has brought their matrimonial relations to a very unsatisfactory condition. One cannot imagine an Italian or a Spaniard in any other than a humble attitude in the presence of the fair. The Germans are sure to yield a ready obedience to the sex that holds possession of the kitchen and pickled-cabbage cupboard. As for America, a country unprejudiced by the romantic traditions of the middle ages, a land professing to uphold the freedom of the individual as her one great institution, she is in the worst plight of all. Unless we marry a woman, we are pretty free here, but it seems that anything in a gown can 'fag' anything in a coat on the other side of the Atlantic. You are apt to be called upon to give up your seat, your room, your dinner; to see after luggage, to nurse a baby, anything, by any woman, whether you ever saw her before or not. And you must obey. No, if a man can't be master of his own house in England, he certainly cannot anywhere else.

The worst of it is, that not only do I find it impossible to discover a practical instance, I cannot see, theoretically, how a man should be what I want to find him in this matter; if he loves his wife, he is anxious to please her, and of course she can wheedle him. If he does not, he is anxious to conceal that fact, probably from her, certainly from the world in general; and there is a weak point for her to work upon!

Though history and tradition are silent upon the matter, I am perfectly convinced that it was a woman who first found out that you might guide a horse with a bit in his mouth, and a bull by a ring through his nose.

Now, the intelligent reader, who has had experience of the art of leading up to a story, must have become aware that I have got an anecdote to relate. He is quite right. In the course of my studies upon my favourite topic—for I spent a considerable portion of my life in hunting for some precedent of better authenticity than the trials of Patient Grizzle—I found a narrative, in an old book of French Memoirs, of a certain curé of St Opportune, which bears upon the subject, but which only tends to strengthen me in my determination to 'bear the ills I have,' rather than 'fly to others that [by personal experience] I know not of.'

Take note, if you please, that I do not condemn the present state of the relations between the sexes. I do not by any means assert that it is good for a man to have his own way in everything. I only know that I have been used to it from twenty-one to—say forty-one; and that I have no notion of substituting any one else's will, however charming the willer, for it.

But this is the anecdote. There was once a curé of St Opportune, who was very different from the conventional idea of a priest, being tall, thin, and

delicate-looking; a man with a stoop, though he was still young, and much given to all lawful study. He lived in an age which has long passed away, yet he was behind it, for he held most antiquated opinions upon the obedience which is due from wives to their husbands, and seemed to consider that what St Paul had said upon the subject was to be taken in its strictest sense, that no allowance could be made for the changes which had taken place in the manners and customs of different nations, but that all infringement of the rules laid down by the apostle for the guidance of those in the holy state was sinful.

He found his exhortations treated with unbecoming levity, and thereupon became, of course, more and more earnest upon the subject, till at last he laid rather too much stress upon this one offence, to the overlooking of others. But he did not become unpopular upon this account, rather the reverse; for the men naturally felt great respect for a pastor who pleaded their cause so eloquently, and impressed upon their wives that submission to their will was their first and most solemn duty; while the women of his congregation were glad to have slight attention paid to the confession of other sins of which they were ashamed, and the full phials of clerical wrath poured out upon one which they had the consolation of feeling assured was shared by their entire sex.

But that which most vexed the good curé was the *bonhomie* with which some of the husbands amongst his parishioners submitted to the rule of their wives, and the blind infatuation which caused others who were equally tame to fancy that their will was law, and that the very women who led them by their noses were their devoted slaves.

Provoked by these last especially, he one day addressed his congregation, after the sermon, thus: 'My garden has been remarkably fruitful this year, especially in peas. Magnificent peas they are—the best I have yet seen; and I here offer a prize of as many peas as he can carry away with him to any married man amongst you who can make it clear to me that he is not under subjection to his wife.'

Peas were valuable, the parishioners of St Opportune were poor, and, as a rule, confident in their marital supremacy, so that there were many applicants for the prize. But the curé, trained by the duties of the confessional, was a keen hand at cross-examination, and under his home-thrusts and pertinent questions, claim after claim was upset, and the candidates sent away abashed and discomfited.

At last came a porter, an obstinate, sturdy fellow, who was confident that he at least had the whip-hand of his wife. The curé questioned him closely, but all his answers were straightforward and satisfactory. Even upon the rock which had upset the pretensions of many who had seemed in a fair way to land safely, the *cabaret*, he did not split. No, he went to the wine-shop or stopped at home, got drunk or kept sober, just as he pleased. His wife had not a word to say to it.

'Well,' said the curé, 'I am glad that I have one man in my parish who knows how to be master in his own house. Come to-morrow morning, and fetch your peas.'

So the next day the porter came to the curé's house with a small sack, which he began to fill.

'You should have brought a larger one,' said the curé.

'Well, now,' replied the porter, pausing in his task, 'I should have done so, only my wife would not let me.'

'Ha!' cried the curé: 'let my peas alone, my man!'

BROUGHT TO LIGHT.

CHAPTER XL.—A MADWOMAN'S REVENGE.

NIGHT after night, with quiet, stealthy patience, the woman Marie laboured at the task she had set herself to do. But it was not every night that she could so work, for there were quick ears at White Grange; more than once she had been surprised in the dead of the night by the sudden entrance of Peg Orchard, her youthful jailer, who slept in the next room, and who had been disturbed by the rasping of Marie's knife against the iron window-bars; and on one occasion old Nathan himself had put in a sudden appearance, carrying a lighted candle in his hand; but Marie was far too alert and wary to be caught at work, and was always found in bed by her nocturnal visitors, and to all appearance asleep. So it was only when the wintry wind, blowing shrilly round the exposed Grange, shook the crazy old building in its burly arms, causing doors and windows to rattle and creak, and haunting the dark wakefulness of such of the inmates as could not sleep with strange weird noises, never heard at other times, that she could labour at her task with any degree of safety. And now that task was all but done. With the old knife which she had picked up by stealth in the orchard, she had sawn through two of the iron bars with which one of the windows was secured, or so nearly through them that two or three hours more would see her labour accomplished. Had not the bars been rusted and corroded with age, they would probably have baffled all her efforts with the feeble means at her command; but such as they were, she had overcome every difficulty, and now her reward seemed almost within her grasp.

She had been working for freedom. To get away, anywhere, out of that horrible prison, in which she had been shut up for so many weary, weary weeks, was the one absorbing idea that filled her secret thoughts by day and night. What she should do, after getting away—what was to become of her, without money or friends, at that bleak season of the year, was a thought that rarely troubled her: that one passionate longing to escape absorbed all the little mental energy that was left her in these latter days. Whenever she tried to look forward, to calculate future probabilities, there rose before her mental vision a dim blurred picture, in which everything shewed indistinctly, as though seen through a mist that was far too dense for her wearied aching brain to penetrate. It was always the same, too, when she sat down on the floor, and stuffing her fingers into her ears, tried to think out some scheme of vengeance upon the arch-enemy of her life. She knew that Duplessis was beneath the same roof with her; she had heard his voice on two or three occasions, although she had never seen him since the first night of her incarceration; and the sound had filled her with such a secret but intense fury, that had she been able to reach him, she would have flown at his throat like some savage creature of the woods. Yet, with all her hatred of the man, whenever she tried to work out to a definite issue the feelings with which she

regarded him, and looking forward to the time when she should be once more a free woman, strove to trace mentally the outline of some scheme by means of which she should wipe off at once and for ever the accumulated score of many years, her feeble brain would again play her false; and however hard she might strive to retain her gripe of them, her thoughts would begin to slide and veer, and crash one against another, like icebergs in a troubled sea; and then the inevitable fog would swoop suddenly down, and everything would become blurred and dim; and she would wake from her reverie with a start, and a childish treble laugh, and set to work with renewed assiduity at the dressing of her dolls. But when midnight came round, and all the house was still, then she seemed an altogether different creature as she crouched on the window-seat, with her knife in her hand, labouring slowly and steadily, with a sort of concentrated ferocity of patience, in which there was no trace of a weakened intellect. 'You and I, *cher Henri*, have a heavy account to settle,' she would then often murmur to herself. 'It is a debt of long standing, and must be paid to the uttermost farthing.'

The night fixed upon by Duplessis as the one for the secret expedition of himself and Antoine to Belair, was also the one on which Marie had decided, provided the weather were favourable, to carry out her long-cherished plan of escape. During the afternoon there was a light fall of snow, just sufficient to whiten the moorlands, but not deep enough, except here and there, where it had drifted, to impede walking. As night set in, a keen northerly breeze sprang up, which crisped the fallen flakes, and whistled shrilly round the old Grange, grumbling hoarsely in the chimneys, and trying the fastenings of door and window, and making the madwoman's heart beat high with hope. If only it would last till an hour after midnight! She went to bed as usual about ten o'clock; she could trust to her instinct to awake at the first stroke of twelve. When Peg Orchard left her that night, Marie called the girl back after she had got outside the door, to give her another kiss. Then she got into bed, and in five minutes was soundly asleep; but before the clock on the staircase had done striking twelve, she was as wide awake as ever she had been in her life. She sat up in bed, and listened intently. The wind seemed, if anything, more blustering than ever. How lucky that was! She would have dearly liked to scream in chorus with its wild free music, so light-hearted did she feel; but she bit one of her fingers instead till the purple teeth-marks made a deep indented ring round it. Then she slipped noiselessly out of bed, and crept to the door, and put her ear to the keyhole. *Diab!e!* they were not all in bed yet, those beasts there! She could distinguish a faint murmur of voices below stairs; and presently a door opened, and the voices grew louder, and then she recognised them for the voices of Duplessis and Antoine; and she snarled in the dark, as she listened to them, like some ferocious animal. She could not distinguish a word that was said, and in a minute or two the two men seemed to go out at the front door, and then everything but the wind was still. For a full hour longer, she crouched against the door, except for her breathing, as rigid and motionless as a mummy; listening, with all her senses on the alert; but the dead silence inside the house was

unbroken by any sound that owed its origin to human agency. When the clock struck one, she rose up, as silent as a shadow, and stretched out her cramped arms, and pushed the tangled ends of hair out of her eyes, and began to set about her great achievement. An hour's quiet steady labour with her jagged blade, and at the end of that time the first great obstacle was overcome; the two bars, sawn completely through, came away from their places, and were carefully deposited by her on the floor. The window was a considerable height from the ground, but that was a difficulty readily overcome. Taking the sheets and coverlet off the bed, she dexterously twisted and knotted them into a stout serviceable rope, one end of which she proceeded to fasten round the stump of one of the bars, while the other end hung down outside nearly to the ground. But little now remained to be done. Having inducted herself into a little more clothing than she had been in the habit of wearing for some time past, but still with her favourite red flannel dressing-robe outside, and with a white handkerchief thrown over her head, and tied under her chin, she felt herself thoroughly equipped for her undertaking. In one corner of the room was a rude box, in which she had been in the habit of keeping her dolls, and the little scraps of finery out of which their dresses were manufactured. One by one she took up the puppets and kissed them tenderly. 'I am going to leave you, my pretty ones,' she murmured. 'You will look for me to-morrow, but I shall not be here. I am going a long, long journey; whither, as yet, I hardly know; but out into the snow and cold wind, where your tender little buds of life would quickly perish. I leave you to the care of that good child, Peg. She will attend to you when I shall be far away. And now, adieu! I love not to part from you, but freedom is before me, and I cannot stay. Adieu! my little ones, adieu!'

She shut down the lid of the box with a weary sigh, and then stood thinking, or trying to think, for the effort was almost a futile one, with her hands pressed tightly across her temples; but whatever the idea might be that she was striving to grasp, it was gone before she could seize it, so, with an impatient little 'Pouf!' she dismissed the subject from her mind. One more pull, to test the strength of the knots she had made in her rope; she took up her knife, kissed it, and stuck it in her girdle; and then she crept through the open window, and taking the rope in both hands, slid nimbly to the ground, and felt that she was free. There must have been a sort of mental intoxication in the feeling, for no sooner had she reached the ground than she went down on her knees, and seizing her short black hair in both hands, as though to steady herself in some measure, she gave vent to a burst of horrible silent laughter, a sort of laughter that was largely mingled with ferocity, and which seemed almost to tear her in two, so violent was it, leaving her breathless and exhausted when it died out, which it did as suddenly as it had begun. 'I've not been so gay for a long time,' she murmured, as she gathered herself up, and set her face towards the open moors. 'I could sing, to-night; I could dance—oh, how I could dance! only it would not be decorous in a lady circumstanced as I am.'

The window through which she had escaped was at the back of the house, and Marie now found

herself in the rick-yard, as it was called, from which a gate opened at once on to the moors. One source of disquietude was removed from her mind: she knew that Duke, the great house-dog, had gone with one of the young men to a distant fair; Peg had told her so; so there was no fear of an encounter with him. Just outside the rick-yard gate, Marie's eye was caught by something, and she stopped for a moment to think. What she saw was a small grindstone, placed there for the use of the household. Next minute, the stone was going slowly round, with the blade of Marie's knife pressed against its surface.

She went on her way after a time, walking across the moors in a direct line from the back of the Grange. The night was clear and frosty. The heavy snow-clouds had broken here and there, and through the wide rifts the stars were shining brightly. From snow and stars together, there came quite as much light as Marie needed, and she went onward without hesitation, neither knowing nor caring whither her errant footsteps might lead her; knowing and caring only that every step forward removed her so much further from the abhorred prison she had just left. She was not greatly troubled by any thoughts of pursuit; she knew that, in all probability, her escape would not be discovered till daybreak, by which time she should be long miles away; and she had all a lunatic's faith in her own cunning and ability to outwit her enemies. She was the sole living thing to be seen on that white desert; but the loneliness of the situation had no terrors for her, and she went calmly on her way, singing now and again a verse from some *chanson* descriptive of the loves of Corydon and Phyllis à la Française.

She had left the Grange a mile or more behind her, and now the road, or rude footpath, for it was nothing more, to which she had kept, dipping from the higher levels of the moor, began to tend gently downward; as it did so, the sound of falling water took her ear, and in a little while she came to a deep cleft or ravine in the hillside, at the bottom of which a little stream, whose voice the frost had not yet succeeded in silencing, was brawling noisily. This gash in the fair hillside evidently resulted from some three of nature countless ages ago. It was from eighty to a hundred feet in depth, and from fifteen to twenty feet wide. Both its sides formed sheer precipices of black rock, as bare and devoid of verdure as on the day they were first laid open to the sky; but the margin of the ravine was fringed here and there with thickets of stunted shrubs. The path traversed by Marie led direct to this ravine, across which a rude foot-bridge had been thrown, to accommodate the inmates of the Grange, for this was the nearest way down to the high-road in the valley leading to certain out-lying villages where the family at the Grange had sometimes business to transact, and effected, as regards those places, a saving of nearly three miles over the orthodox road; besides which, if there was a heterodox road to anywhere, old Nathan Orchard was just the man to take such road from choice. This bridge over the ravine was of a very primitive character, consisting as it did of nothing more permanent than a few strands of rope stretched across, and fastened on each side to the stumps of trees, with cross-strands of thinner rope, over which were laid a few pieces of planking, pierced at the corners, and tied with strong wire to the cords below. As a further security, a hand-rail of stout

rope was stretched from side to side about three feet above the bridge itself. To any person with weak nerves, the crossing of this rude bridge, which began to sway in an alarming manner the moment you set foot on it, was not unattended with danger, seeing that a single false step would serve to precipitate you to the bottom, and leave but little chance of your being found alive afterwards; but such as it was, it had served the family at the Grange for many years, and was likely to last for many years to come.

Marie stepped fearlessly on to the bridge, and pausing when she reached the middle of it, took hold of the hand-rope, and leaning over, gazed down into the dim caldron at her feet. Eastward, the moon was rising over heathery hills, and the clouds fell away before it as it slowly clomb the great azure plains, and little by little all the wild features of the scene were lighted up under the eyes of the madwoman. She could see the black riven sides of the gorge, looking as if they had been torn asunder only an hour ago; she could see the glinting of the white water where it tumbled over a ledge of rock some twenty feet in height, and again, as it seethed and bubbled angrily among the jagged granite teeth with which its after-course was thickly strewn; and as she gazed and listened, the voice of the water seemed to syllable itself into words intended for her ear alone. 'Come to me, come to me,' it seemed to say; 'here 'tis ever sweet to be—sweet to be.' Nothing more; only those few words, over and over again, in a sort of murmurous sing-song, that awoke vague echoes in her brain. The water spoke to her as plainly as she had ever heard human voice speak. The danger, and she seemed to know it, lay in the perpetual iteration of the words, 'Come to me,' the effect of which upon her excitable nerves was to work her up into a sort of dreamy ecstasy, which might not improbably culminate in her striving to obey the invitation by leaping headlong from the bridge into the gulf below. She strove, however, to break through the spell that was being woven over her, dragging herself slowly and with difficulty, as though she were being plucked at behind by invisible hands, from the spot where she had been standing, to the edge of the ravine, and stumbling forward on her knees the moment she felt herself on firm ground.

'Sorceress, I have escaped thee!' she cried aloud. 'I will not obey thy summons. Thy silvery voice would lure me to destruction. But hark! I hear another voice. One whom I know well is coming this way, and he must not see me. Hush!'

Still kneeling, and with upraised finger in the act of listening, all the pulses of her being seemed to stand still for a moment, while she waited to hear again the voice which had startled her. It came again, and this time nearer than before. There could be no mistaking whose voice it was; and as its familiar tones fell on Marie's ear, she forgot all about the water-sprite's invitation—forgot everything except the one fact, that the man whom she hated with all a lunatic's intensity of hate was close beside her, and that there were now no stone walls, no iron bars between them two. As she realised fully that this was indeed so, a great wave of fire seemed to sweep across her brain; and all at once the moon looked blood-red, and the stars took the same colour, and all her muscles seemed to harden, and her fingers began to grope instinctively for the haft of her knife.

There was a thick clump of underwood growing close to the spot where she was kneeling, and partly overhanging the brink of the ravine. She was only just in time to reach the shelter of these shrubs, when the head and shoulders of a man came into view above the opposite slope of the hill; and the same instant the handsome, crafty face of Duplessis was evanescently lighted up by the blaze of a fusee, as the Canadian paused for a moment in the act of lighting another cigar. As he did so, he spoke again, addressing himself to Antoine, who was toiling painfully up some distance behind his master: 'Another little pull, my cabbage, and we shall be on level ground, and then half an hour's brisk walking will take us to the Grange. An hour of this exercise every morning before breakfast, would soon bring down that overfed carcass of thine to something like reasonable proportions.'

'Oh, Monsieur Henri,' panted Antoine, 'but it is cruel, my faith, to drag persons of delicate stomach up these precipices! Why wasn't the world made without hills? It would have been a much pleasanter place to live in than it is now.' The glowing tip of the cigar was coming nearer and nearer to the madwoman hidden in the thicket. 'But with regard to *La Chatte Rouge*,' continued Antoine, 'has Monsieur given my proposition due consideration? It is simple, it is safe, it is effectual. Let Monsieur go to Paris and enjoy himself, and leave Antoine to clip the claws of *La Chatte*.'

'*Scélérat!*' hissed the madwoman, from her hiding-place. 'La Chatte would like to drink thy heart's blood!'

The glowing tip was very close now. Duplessis, with one foot on the bridge, and one still on firm ground, paused for an instant to answer Antoine.

'Take care, my infant,' he said laughingly, 'that she doesn't claw thine eyes out in the process.' With that he took hold of the hand-rope, and came forward, step by step, slowly and cautiously. The frail structure bent and swayed under his weight in a way that might well have alarmed a man of weaker nerve. He had reached the middle of the bridge, when he looked up suddenly, for the dry branches of brushwood were cracking, as if some one were hidden among them; and then he saw that he stood face to face with the woman of whom he had just been speaking. She rose before him like an avenging spirit, her eyes blazing with madness, and her white face distorted with an intensity of hate such as no words could have expressed.

'I am here, Henri Duplessis,' she said; 'here—*comprends tu?* and thy prisoner no longer. The hour of our reckoning has come at last!'

Her fingers were still nervously seeking something in the folds of the shawl that confined her waist; and as she spoke, she moved a step or two forward. So unlooked for, so utterly unexpected was the apparition of this woman, that for once Duplessis lost his presence of mind. As Marie made a step forward, he took one backward; and as he did so, his foot slipped off the narrow plank on which he was standing, thickly crusted as it was with frozen snow. He slipped and fell, with a wild, inarticulate cry of horror; but as his feet slid from under him, he clutched convulsively at the hand-rope, which yielded fearfully to the sudden strain, but did not break; and so he hung for a few seconds over the ravine, making desperate

efforts to recover his footing on the slippery planks. With a cry that seemed like an echo of his master's, Antoine rushed forward to the assistance of Duplessis; but Marie was at the bridge before him. For one brief instant, the blade of her knife gleamed whitely in the moonlight, and then it came swiftly down on the rope by which Duplessis was hanging, severing the strands one by one with its keen edge; and while Marie's wild maniacal laugh, that was as much a shriek as a laugh, rang shrilly over the moorland, the last strands gave way, and Duplessis, still clinging to the rope, was dashed with frightful violence against the opposite side of the ravine, and falling thence, came down with a dull thud, which chilled the blood of Antoine to hear, on to the sharp-pointed rocks below, round which the angry stream was ever brawling.

Again the maniac's shrill laughter awoke the faint moorland echoes. 'Gone! gone! and Marie is revenged at last,' she shrieked. 'How his eyes glared at me in the moonlight as he hung by the rope! I never felt so merry before—never—never.' And with that she broke into one of her *chansons*, and wandered away towards the head of the ravine, as forgetful, apparently, of the recent tragedy, as though no such person as Henri Duplessis had ever existed; while heart-broken Antoine, calling his master's name aloud, went searching, like one half-crazed, for some path by which he could obtain access to the bottom of the ravine.

CHAPTER XLII.—ANTOINE'S NARRATIVE.

Towards the close of a bright February afternoon, about a month after the events related in the foregoing chapter, a man, well wrapped up from the weather, might have been seen toiling slowly through the park on his way to Belair. To the footman who answered his imperative ring at the side-door, he gave a parcel, done up in brown paper, and sealed with several great splashes of red wax, and charged him to deliver the same without delay into the hands of Lady Spencelaugh, and of no one but her; and then adding that no answer was required, he slunk away from the door, and was presently swallowed up in the dusky park, seeming to melt into and become a portion of the dim shadows that were mustering so thickly under the branches of the old trees.

The packet, on being opened, was found to contain Lady Spencelaugh's stolen jewels: not a single stone was missing. Beside the stolen property, there was a letter addressed to her Ladyship, written in French by Antoine Gaudin, but too lengthy to be given here in its entirety. Of its chief points, however, as explanatory of certain events narrated in the earlier chapters of this history, the following may be taken as a free translation; although it was difficult, here and there, to make out the sense of the original, owing to Antoine's execrable writing, and his curious method of spelling, based, apparently, on some phonetic system of his own.

MY LADY—In the interests of human nature in general, and of the late lamented Monsieur Henri Duplessis in particular, it is requisite that the underwritten explanation of certain events as drawn up by me, Antoine Gaudin, be read with serious attention by your Ladyship. It is a justification to the world of the great heart that has gone from among us. For, alas, Madame, my dearly-loved master is no more! My eyes are

wet as I write these words. But for the moment, I put Sentiment, the generous, the profound, on one side, and will try to set down what I have got to say after the fashion you English love so much—in a 'business-like way.' (Ah, the droll phrase!)

Monsieur Henri Duplessis was born in Canada, of a noble French family that emigrated to that country about a century ago. My mother was his foster-mother, and I was his foster-brother, and so I learned to love him, and devoted myself to his fortunes through life. M. Henri's parents both died when he was quite young; and when he came of age, he found himself master of a handsome fortune, with all the inclination to enjoy it. At that time, he was young, ardent, generous, and impulsive, and as handsome as Apollo's self. We—that is, he and I—set out on our travels; and first we determined to see whatever the American States could shew us that was worthy of our regards. To my dear master, after the studious and secluded life to which he had been condemned during his youth, New York seemed a very Paradise of delights, and he tasted of every pleasure that it had to offer him. Grown tired after a time of city-life, he determined to study nature in some of her wilder moods, and man in some of his more primitive aspects, and we set out for the Far West. It was while we were taking this journey, on our way to the prairies, at a little town in one of the western states, that my dear master first encountered the evil genius of his life in the person of Marie Fevriez. Marie was an actress, born in America, of French parents; young and enchanting enough at that time, I must admit, with a certain devil's beauty about her, which had for M. Henri an irresistible but fatal attraction. It was on the stage that he first saw her. She was performing her great part in a piece adapted from the French, entitled *La Chatte Rouge*, in which she appeared in a flame-coloured robe, and in a certain dark scene with real phosphorescent flames playing about her head; and enacted a sort of beneficent fiend, avenging her own wrongs, and those of the good people of the play at the same time. She was not an actress that would please a first-class audience; she lacked both education and refinement; but she was not without power of a certain kind, and was much run after in the rough country towns where she commonly played.

Well, my master fell in love with *La Chatte* at first sight. It was not difficult for a man in his position to obtain an introduction to her, and he was not the less fascinated when he saw her off the stage. Certainly, she was a splendid animal at that time. My master made love ardently, proved to her the extent of his fortune, overwhelmed her with lavish presents, and ended by asking her to become his wife, and accompany him to Europe. In a brief three weeks from the night on which he first saw her, they were husband and wife.

They went to Europe, but I was left behind. Madame did not like me, and I did not like Madame; and M. Henri was so infatuated just then that he was persuaded into giving me my *congé*. They spent five years on the continent, at the end of which time Monsieur returned to his own country, beggared in purse, and separated from his wife; and little by little the wretched story came out. Gambling, and extravagance of every kind, leading by easy but rapid steps to bankruptcy and general ruin; and combined therewith, the bitter

certainly that the woman he had loved with such foolish madness had only cared for him because of his money—and to his proud spirit that was the bitterest stroke of all. My master was a man of strong passions—a hot lover and a fierce hater—and he now hated the woman to whom he was chained for life with a depth of hatred equal to the love he had formerly borne her. Of all his fortune, nothing now remained to him but a little farm in a wild part of the country, and thither he and I now retired from the world, and spent three or four quiet years. Those years at Petit-Maison I believe to have been the happiest of my dear master's life. No longer able to move in that society which he loved so much, and of which he had ever been so bright an ornament, he fell into his new and narrow mode of life with the native cheerfulness of a true gentleman, whom nothing can ever really disturb so long as he retains his faith in himself. He looked after his farm, and read his books; and by way of variety, he and I would often go on long fishing-excursions to the lakes. But by and by, an aunt of M. Henri died, and left him another fortune—a little one, this time, and by no means equal to the fortune he had spent; and with it came the desire to go out once more into the world, and resume his position in society. Of Madame, we had heard nothing positive for a long time. We only knew that she had taken to her old mode of life, and was wandering somewhere among the outlying states with an itinerant troop of players. Among his friends in Toronto and Montreal, it was, of course, known that M. Henri had been married; but as no one there had ever seen his wife, and as it was known that he had been living *en garçon* for the last three or four years, people concluded that Madame was dead, and, for reasons of his own, my dear master was desirous that such a belief should be universally adopted. What, then, was our surprise and disgust when, one morning, about a fortnight after our arrival at Montreal, Madame Marie turned up at our hotel, and demanded to see M. Henri. To deny her was out of the question. By some means, best known to herself, she had heard that my master was once more a rich man, and she had come with the intention of doing her best to ruin him for the second time. She demanded one of two things: either to be acknowledged as the wife of M. Duplessis, and received as such by his friends; or else to be subsidised by a sum equivalent to half his annual income, on condition that she kept the marriage secret, and never entered Canada again.

To no other terms would the harpy listen; and my master was fain, at last, to accede to her second proposition, and so rid himself of her presence for ever. Having settled everything so much to her own advantage, she set out on her return to the States, but had only left Montreal a few hours when she was seized with illness so severe as to be unable to continue her journey. An address found on her person caused my master to be sent for; and on reaching the hotel where she lay, we found her far gone in a severe attack of brain-fever. She ran a close race for her life; ultimately, she recovered; but the fever had left her with a twist of the brain, which made it doubtful whether she would ever be fit to mingle with sane people again. It seems that there was a hereditary taint of insanity in her family, and now the blight had fallen upon her. My master had her placed in a private asylum, kept by a man of the name of Van Goost; and it

was fully understood between them that Madame was to be considered as insane during the remainder of her life; Van Goost, in fact, constituted himself her jailer for life, for which service he was of course handsomely paid.

After this little episode, M. Henri, accompanied by your humble servant, set out for Europe for the second time; and it was in the course of this tour that we first had the honour of meeting your Ladyship and the late excellent Sir Philip. Your Ladyship knows how the acquaintance began; how we all came to England together; how my master took up his residence at Lilac Lodge; and what a great favourite he was with Sir Philip. It was some time before this that the brilliant idea had first struck him, which he now began to elaborate carefully. Marie was shut up for life; he himself was, to all intents and purposes, a free man; he would marry an heiress, and make his own fortune and mine at the same time. Ah, the beautiful scheme! it was worthy the genius of M. Henri. The charming Mademoiselle Frederica was the object of his adoration; and he would have married her, Madame, as surely as you read these lines (and what an excellent husband he would have made her! for he had the good, the noble heart), but for a most unhappy accident. That accident was the escape of *La Chatte Rouge* from the custody of the Herr Van Goost. She got into Van Goost's private room the night she went away, and ransacked his papers till she found a letter containing M. Henri's address in England; and in less than a month from that night, she arrived at Kingsthorpe Station. She was disagreeable at first, and seemed inclined to spoil everything; but ultimately she fell into M. Henri's views, and agreed to pass as his sister, but insisted upon being introduced as such to his friends at Belair. With an understanding to that effect, my master left her; but to introduce this uncultured creature—who required winding up with cognac every morning, and whose manners and conversation had a coarse theatrical tinge—as his sister to the refined and courtly Sir Philip, and to the beautiful miss who was to be his wife, was more than he could bear to do. In this emergency, Antoine proved himself a useful ally.

On the third day of Madame's stay at Kingsthorpe, M. Henri went to fetch her away, on pretence of taking her to more comfortable apartments in a neighbouring town. He drove her round by way of the old coast-road, as being more lonely and suitable for the purpose he had in view. Half-way along this road, in a curve of the moors, there lay perdue a covered cart, in attendance on which were your humble servant, and another individual whom it is unnecessary to name. Madame was evidently distrustful of M. Henri's intentions; and when, shortly after leaving Kingsthorpe, her nose began to bleed, her superstitious nature at once put down that little incident as a bad omen, and she implored him to take her back; but he only laughed at her ridiculous fancies, as he called them, and drove on faster. When opposite the spot where we lay hidden, M. Henri requested Madame to alight, on the plea that something was wrong with one of the wheels of the gig. She got down, and seated herself on the grass, close by the spot known as Martell's Leap. The signal agreed upon as a summons to us who were in hiding was a shrill whistle. The signal was so long in coming, that I grew curious at last, and popped my head over a hillock to see how affairs were progressing;

when what should I see but Monsieur and Madame struggling together like two mad people, and apparently trying which could throw the other over the precipice. One of them was really mad, and that was Madame, as we were not long in discovering, when we succeeded in separating them, which we did only just in time—another minute would have seen one or both of them tumbled from the cliff. Madame's old malady had suddenly come back upon her as she sat there on the grass; and when M. Henri approached her, she sprang up, and seized him by the throat, and swore that she would fling him over the precipice. 'In the sudden surprise of such an attack, I forgot everything except the very proper desire I had to keep my neck unbroken,' said M. Henri, afterwards. 'I forgot entirely that a single cry for help would have brought you two worthy fellows to my assistance; and I believe I should have gone over the cliff in grim silence, had you not appeared just at that last opportune moment which is always provided in plays and romances for the rescue of virtue in distress.'

It was a raving madwoman, tied tightly down among the straw at the bottom of the light cart, that we took that evening across the moors to a certain house, where her coming as a sane woman had been provided for. Shut up here from the world, she was at liberty to be mad or not, as pleased her best; what would be her ultimate fate, was a question left open for future decision; she was removed from my master's path, and M. Henri was now at liberty to act as though no such creature were in existence.

Who was the writer of the mysterious letter received by my master one night about two months after Madame Marie had been so judiciously disposed of? That is a question which neither M. Henri nor I was ever able to answer. It was a letter written under a wrong impression—written under the impression that M. Henri had committed a murder; warning him that his crime was discovered, and that the police were on his track; and advising him to flee while he had yet an opportunity of doing so. He did flee—not that he had committed the crime imputed to him, but because his staying would have involved the discovery to the world of that dark secret which he had been at such pains to hide from it; and, as he afterwards confessed, he lacked the courage to go through such an ordeal. His hopes were crushed at one fell blow; the edifice which he had been patiently building for so long a time had crumbled into ruins at his feet; and there was nothing left for him but to get away as quickly as possible. He lay hid in London for several weeks, and then he ventured down to Monkshire in disguise, and took up his abode for a time in the very house where his mad wife was shut up; and there I joined him. By this time, his second fortune was almost gone; for, without being extravagant in any way, his expenses had been heavy, and so long as the prospect of a wealthy marriage lured him on, he hardly cared how his money went. But it was now, when the dreadful eyes of poverty were staring him in the face, that the happy genius of M. Henri shewed at its brightest. He conceived a brilliant scheme, which, if it proved successful, would rehabilitate his broken fortunes at a single coup. You, Madame, as the victim of that plot, are scarcely perhaps the proper personage to appreciate its brilliancy; but I will venture to state that

no disinterested person could become acquainted with its details, without passing a eulogy on the daring and ingenuity with which its every step was characterised.

How we sped that night at Belair, your Ladyship knows as well as he who writes these lines, for your two visitors were none other than M. Henri Duplessis and Antoine Gaudin; and the survivor of the two now craves your Ladyship's pardon for the violence which the necessities of the case compelled him to resort to. We had succeeded, M. Henri and I, almost beyond our expectations: the gems which my master had on his person when we left Belair that night, would, in that New World to which we were bound, have formed the nucleus of the colossal fortune which M. Henri had determined on devoting all his future energies to building up; and that he would have succeeded, who that knew him could gainsay? But for him no such bright future was ever to dawn. We were walking across the moors on our way home, when that wretch—that tigress—that fiend incarnate, who with devilish cunning had contrived to make her escape, suddenly confronted my master, who was walking a short distance in front of me; and before I had time to interfere in any way, he was no longer among the living. The precise mode of his death, it is needless to detail here. It is sufficient to say that that woman is his murderess; and had I been able to reach her at the time, she would not have escaped with life. My dear master lies buried under the wild moorland: these hands dug his grave, and these eyes were the last that looked on him before the turf was laid over his head that covered him up from human ken for ever. It was better so; all the 'inquists' in the world could not have brought him back to life for a single moment; and he will sleep none the worse in that he does not rest under the shadow of one of your churches. I return you the gems and other articles borrowed by M. Duplessis from your Ladyship. Now that his dear master is dead, Antoine cares not to retain them.

From this narrative, your Ladyship will perceive how largely M. Duplessis was the victim of unfortunate circumstances; and remembering this, you will not fail to do him justice in your recollections. You, Madame, know what he was in society—how handsome, how witty, how accomplished; but the silver lining of his character—his goodness, his generosity, the thorough nobility of his disposition, can never, alas! be known fully to any one but to him who writes these lines—that is to say, Madame, to your Ladyship's humble and devoted servant,

ANTOINE GAUDIN.

THE MONTH.

SCIENCE AND ARTS.

THE opening of the first of the schools where the middle classes of London may get their sons well educated for four guineas a year, has been attended by results that justify to the full the expectations of the promoters. Four hundred boys have already entered; many more are waiting their opportunity, and so pressing is the demand, that the school premises are forthwith to be made large enough to accommodate a thousand boys. At the same time, a site is being looked for in the suburbs on the 'Surrey side' on which to build another school—

house; and considering how numerous are the middle-class residents in that quarter, there can be no doubt of their appreciating the offered advantage. There are hundreds of clerks in London, with salaries ranging from one hundred and fifty pounds to two hundred and fifty a year, who will now be able to give their boys an excellent English education with but a slight strain on their income when compared with former payments. One of the regulations of the new school (which all other schools ought to adopt) is to require a quarter's payment in advance. If a boy has not paid his guinea by the third day after his entrance, he is summarily dismissed. In addition to the school lessons, a course of drill is given by a drill-sergeant, which is good exercise for the boys, and a means of recreation.

As is well known to many readers, numerous observations of the sun have been made of late years, and conclusions more or less satisfactory have been arrived at as to the physical constitution of the great luminary. In science, however, as in other subjects, there is much to be said on both sides, or on all the sides of a question. Mr Dauge, of the Academy of Sciences, Brussels, shews that all the striking phenomena noted by recent observers of the sun may be fully accounted for by the refraction of the emergent rays in the atmosphere exterior to the sun's photosphere; and he demonstrates that such an atmosphere will produce by its refraction certain effects, thus classified: augmentation of the apparent diameter of the sun—augmentation of the mean period of the sun's rotation—retardation of the apparent motion of a spot in proportion as the same recedes from the centre towards the rim of the sun, besides others in the same class of phenomena. If, on further experiment, all this can be shewn to be an effect of refraction, astronomers and physicists will have much to rectify in their present conclusions. Meanwhile, we may be sure that an active course of observation and discussion will be instituted, with a view to determine which class of observers is in the right.

Foucault, whose improvements in the optical parts of telescopes are recognised among astronomers, has discovered that a coating of gold or silver leaf on the object-glass enables an observer to look at the sun for a length of time without injury to the eye, and without loss of definition in the solar disc. This discovery will materially facilitate observations of the sun. It has further been found beneficial in cases of weak eyes, or of photophobia, when applied to the glasses of spectacles. The light which passes through gold-leaf appears green, and blue when the gold is intermixed with silver. Consequently, the tint can be varied to suit the nature of the case, and afford the desired relief.

A self-winding clock has been invented by Mr Horstmann, of Bath, in which the inconvenience and inaccuracy, so often complained of in ordinary clocks, are for the most part obviated. One element of accuracy is enclosing the whole in an airtight case, which secures a more equable motion of the pendulum than is possible in a case made in the usual way. The winding part of the works, which is entirely independent of the time-keeping movement, consists of a cylinder into which naphtha or 'any other expansive fluid' flows from a cistern conveniently placed, with a piston and chain. The piston moved by the fluid is connected

by the chain with the winding apparatus, and thus whatever the temperature, the winding goes on without any opening of the case or stoppage of the pendulum.

Train-signalling—that is, telegraphic communication between passengers and guard—is to be introduced on the Great Western Railway, on a plan invented by Mr Spagnoletti. The carriages will be coupled with iron bars instead of the usual chains, and through those bars the electro-magnetic current will pass, to connections fitted in each carriage. The working apparatus is similar to that by the same inventor, which was exhibited at the scientific soirées of last season. The passenger pulls a knob or turns a handle, and thereby sends a signal to the guard and engine-driver at the same time, while a disc starts out from the side of the carriage to indicate the compartment whence the signal was sent. In all this, there appears to be nothing complicated. We have seen Mr Spagnoletti's apparatus working experimentally, and with satisfactory results: we hope that in actual practice it will be equally successful.

The photozincographic process by which Sir Henry James reproduces ordnance maps, and has copied Domesday Book and other ancient documents, is to be employed in the Lord Clerk Register's offices at Edinburgh, for the copying of such legal documents as are to appear on the Register. This is a proceeding favourable to accuracy; for if the original paper be accurate, all the copies will be the same: there will be no risk of tearing or blotting the paper, and the cost will be not more than one-fourth of papers copied in the ordinary way by hand.

Boiler-explosions have been so frequent of late, that by the end of the year the sum of disaster will perhaps be greater than in 1865, when fifty-five steam-boilers exploded within the kingdom, fifty-six persons were thereby killed, many more injured, and much property was destroyed. With these facts before us, we have greater satisfaction in noticing a paper *On the Corrosion of Locomotive Boilers, and the Means of Prevention*, published in the *Proceedings* of the Institution of Mechanical Engineers. Boilers of the kind here referred to are subjected to a strain and wear and tear almost incredible, by the high and concentrated pressure of the steam, and by the prodigious quantity of water they evaporate. The wear of a locomotive boiler in from five to eight years, during which it will have evaporated ten million gallons of water, is equivalent to thirty years' wear of a stationary boiler. The waste of the boiler-plates is occasioned by chemical and mechanical means. In certain locomotives, running in Yorkshire, where the water was of a very acid quality, it was noticed that the boilers fitted with iron tubes were scarcely injured after five or six years of work, while similar boilers, fitted with brass tubes, were 'very badly pitted all over,' on the inside of the plates, owing, as is supposed, to some galvanic action between the brass and iron. Another cause of weakness is the change of temperature produced by the supply of cold water to the boiler, which, however, can be remedied by care in feeding.

Mr Kirtley, the author of the paper above referred to, shews that all these sources of weakness and of danger may be avoided by an improved mode of constructing boilers. Since the tyres of wheels have been manufactured of one single piece, without joint or weld, the breaking of tyres has

become much less frequent than before. Therefore, if a boiler is made of one great hoop, instead of a number of plates, it will be much less liable to explosion than one made in the ordinary way. Machinery has been constructed for the manufacture of the big hoops, and it is expected that hoops will be rolled four feet in diameter, and long enough for an entire boiler. The cost will be somewhat higher than at present; but there will be a great saving in after-repairs, to say nothing of diminution of risk.

This is not mere theory. For six years past, nineteen of these welded boilers have been in constant use on the Midland Railway, and with such satisfactory results, that the same mode of construction has been permanently adopted for all the engines on the line. Each of the boilers has travelled 175,000 miles, and has proved, on examination, 'to be in good condition.'

It is well known to experts that, given time and ingenuity sufficient, the best of locks can be picked. The great gold-robbery on the South-eastern Railway a few years ago, is a case in point, for the depredators spent some months in making their counterfeit keys. Perfect security could only be achieved by making a lock without a keyhole, or without direct access to the works within. Mr J. Beverley Fenby, of Birmingham, has invented such a lock, which is said to 'afford real security against all fraudulent attempts.' The keyhole may be described as a small tube, which will admit the stem of the key, but offers no access to the works; and an important result of this mode of construction is, that the lock cannot be burst open by gun-powder, neither can any hold be obtained for the drilling-machine with which burglars pierce the strongest locks of iron safes. The bit of the key is separate from the stem, whereby the success of a counterfeit is rendered impossible. Another advantage is, that the stem of the key only is used in locking the lock. The stem therefore could be left in charge of a subordinate in an office, but the bit, which is the essential part of the key required in opening the lock, need never be used or seen by any one but the principal himself. One stem would suffice for a dozen safes, but the bits would all be different; and these are of such small size and convenient shape, that a number of them might readily be kept in the pocket, without the inconvenience attending a large bunch of ordinary keys.

To these particulars about a new lock, we may add a notice of a newly-invented latch, called the 'needle-latch,' which is simple in construction and moderate in cost. The 'needles' are steel wires, and these being attached in a particular way to that inner portion of the lock known to locksmiths as the 'stump,' are operated on by the key, and moving in various directions, can be brought to their true position with the proper key only. If a counterfeit key be used, the needles fall into traps, which at once check their movement, and detect the surreptitious attempt to open the latch.

For the past two hundred years, schemers and inventors have been trying to shew that a vessel may be propelled through the water by the force of a jet of water rushing rapidly from its interior. And now the thing has been realised in the *Waterwitch*, a new ship belonging to the royal navy. Numerous holes are pierced in her bottom, the water enters, and fills a turbine, which is set in motion by a steam-engine. The turbine drives the

water with great velocity through pipes leading in various directions, and opening out at the sides of the vessel. The friction of the water thus driven out against the water in which the vessel floats, sets her moving in the opposite direction; and it is an important advantage that the direction can be changed without stopping the engine. The speed of the *Waterwitch* at her trial was such as to give a successful result to the experiment.

SATURN.

'Tis noon's bright stillness : on the cliff he lies;
Within his dreamy ears, a hushing sound
Of distant waves ; the air and arching skies
Seem breathing ceaseless sighs that die around.

Far down, a summer plain of waters spreads ;
Blue from the deep horizon to the bay,
Where the white marge of Ocean's mantle sheds
In lacy folds the seeming-silent spray.

Round him the solitudes of sun-warm downs,
The close minute-flowered turf, more soft than moss,
Whose breeze-blown wilds the blazing day embrowns,
Haunt of the light-blue wing that flits across.

O'er the wide pavement of the seas below,
No eyes but his with such lulled pleasure look ;
Time knows no other of his shining brow,
His life on Time's vast sands the single brook.

What shall he do who ne'er beheld his like,
But watch the deep to violet change and green ;
Or note the sudden gust descend and strike,
Setting the fretted swell with diamonds keen.

Approaching voice or step he ne'er hath heard ;
The chalk's white bastions built upon the sea
Send forth the skimming, glossy-purpled bird,
The night-black cormorant, or velvet bee.

The rush of some sea-monster breaks the deeps
Into white flashes of the quarried blue ;
The shoal in darkly-rippling thousands leaps ;
Or stoops on long gray wings the snowy mew.

And this is all.—Within his mind he turns,
Pacing his mighty courts, a silent life,
A searching soul, the lonely flame that burns
Before great Jove, or Earth's Titanic strife.

The Novel, BROUGHT TO LIGHT, will be finished in the beginning of December, to be followed, in January 1867, by another ORIGINAL SERIAL TALE.

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